

(19) World Intellectual Property
Organization
International Bureau



12 JUL 2005



(43) International Publication Date
29 July 2004 (29.07.2004)

PCT

(10) International Publication Number
WO 2004/062620 A3

- (51) International Patent Classification⁷: **A61K 31/59**
- (21) International Application Number:
PCT/US2004/000754
- (22) International Filing Date: 13 January 2004 (13.01.2004)
- (25) Filing Language: English
- (26) Publication Language: English
- (30) Priority Data:
60/439,932 13 January 2003 (13.01.2003) US
- (71) Applicant (for all designated States except US):
CEDARS-SINAI MEDICAL CENTER [US/US];
8700 Beverly Boulevard, Los Angeles, CA 90048 (US).
- (72) Inventors; and
- (75) Inventors/Applicants (for US only): **KOEFFLER,**
Phillip, H. [US/US]; 13141 Rivers Road, Los Ange-
les, CA 90049 (US). **KUMAGAI, Takashi [JP/JP];**
1-2-6-1304, Kumeya, Kita-Ku, Tokyo 115-0043 (JP).
- (74) Agents: **GUY, Pamela, M. et al.;** McDermott, Will &
Emery, 4370 La Jolla Village Drive, Suite 700, San Diego,
CA 92122 (US).
- (81) Designated States (unless otherwise indicated, for every
kind of national protection available): AE, AG, AL, AM,
AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN,
CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI,
GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE,
KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD,
MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG,
PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM,
TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM,
ZW.
- (84) Designated States (unless otherwise indicated, for every
kind of regional protection available): ARIPO (BW, GH,
GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW),
Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), Euro-
pean (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR,
GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK,
TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW,
ML, MR, NE, SN, TD, TG).
- Published:
— with international search report
- (88) Date of publication of the international search report:
25 November 2004
- For two-letter codes and other abbreviations, refer to the "Guid-
ance Notes on Codes and Abbreviations" appearing at the begin-
ning of each regular issue of the PCT Gazette.

(54) Title: PARICALCITOL AS A CHEMOTHERAPEUTIC AGENT

(57) Abstract: The invention provides methods of reducing the severity of a proliferative disorder. One method involves adminis-
tering to an individual having the proliferative disorder an effective amount of paricalcitol, wherein the paricalcitol reduces cellular
proliferation, with the proviso that the cancer is not prostate cancer or head and neck squamous cell carcinoma. Another method
of reducing the severity of a proliferative disorder provided by the invention involves administering to an individual having the
proliferative disorder an effective amount of paricalcitol and an anti- cancer agent, wherein the combination of paricalcitol and the
anti-cancer agent reduces cell proliferation, with the proviso that the proliferative disorder is not prostate cancer or head and neck
squamous cell carcinoma.



WO 2004/062620 A3

INTERNATIONAL SEARCH REPORT

International application No.

PCT/US04/00754

A. CLASSIFICATION OF SUBJECT MATTER

IPC(7) : A61K 31/59

US CL : 514/167

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
U.S. : 514/167

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched
NONE

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)
WEST

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	6,624,138 B (SUNG et al.) 23 September 2003 (23.09.2003), see the entire document.	1-60

☐ Further documents are listed in the continuation of Box C.

☐ See patent family annex.

* Special categories of cited documents:

"A" document defining the general state of the art which is not considered to be of particular relevance

"E" earlier application or patent published on or after the international filing date

"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)

"O" document referring to an oral disclosure, use, exhibition or other means

"P" document published prior to the international filing date but later than the priority date claimed

"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art

"&" document member of the same patent family

Date of the actual completion of the international search

25 July 2004 (25.07.2004)

Date of mailing of the international search report

09 SEP 2004

Name and mailing address of the ISA/US

Mail Stop PCT, Attn: ISA/US
Commissioner for Patents
P.O. Box 1450
Alexandria, Virginia 22313-1450

Facsimile No. (703) 305-3230

Authorized officer

Christopher Low

Telephone No. 571-272-0573